



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/445,112	02/17/2000	HEINRICH JURGENSEN	P99.2405	9473

7590

10/23/2002

Schiff Hardin & Waite  
Patent Department  
7100 Sears Tower  
Chicago, IL 60606-6473

EXAMINER

FLORES RUIZ, DELMA R

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/445,112

Applicant(s)

JURGENSEN, HEINRICH

Examiner

Delma R. Flores Ruiz

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 9-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 9 – 20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: One of ordinary skill in the art will not understand the apparatus since the components of the apparatus are not clearly stated at the claim as a complete structure for example without any laser structure, fiber optic structure, no pump light structure or element in the claims.

Claims 9 – 15 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: Applicants fails to provide laser method for the recited functions, for example insufficient step for performing the method for reducing pump light or method step for operating the pump light reducing control.

Claims 9 – 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to the preamble of the claim: the preamble of the claim is insufficient to patentably distinguish the claimed apparatus from the apparatus disclosed by preamble recites a plurality of claims that have nothing to do with the method and apparatus for reducing pump light because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application

being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 9 – 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Wach et al (6,222,970).

***Regarding claims 9, 12 – 15 and 20,*** Wach discloses a method for reducing pump light in an exit of a fiber laser formed of a fiber core surrounded by an inner fiber portion which in turn is surrounded by a sheath, comprising the step of: providing a last section of the fiber laser preceding a light exit for laser light thereof so that at least a portion of the sheath is not provided, the manufacture said last section of said fiber laser has only at least a part of sheath provided thereon, manufacture said last section has no sheath provided thereon all, the step of providing said sheath such that a diameter thereof tapers in wedge-like fashion toward said light exit un a region of said last section, removing at least the portion of said sheath at said laser section by etching, and method for reducing pump light in an exit of a fiber laser formed of a fiber system surrounded by a sheath, comprising the step of: providing a last section of the fiber laser preceding a light exit for laser light thereof so that at least a portion of the sheath is not provided thereat (see Figs. 23, 27B, 29, 55A-D, 59 and 84, Column 11, lines 11 – 58, Column 13, lines 43 – 59, Column 22, lines 40 – 60, Column 29, lines 49 – 65, Column 45, lines 19 – 83, Column 50, lines 44 – 55, Column 69, lines 39 – 43).

**Regarding claim 10 and 11** Wach discloses the step of at least partially stripping said last section of said fiber laser of said sheath and 11 the sheath is entirely stripped away at said last section (see Figs. 23, 27B, 29, 55A-D, 59 and 84, Column 46, lines 55 – 56).

**Regarding claim 16 - 19**, Wach discloses a fiber laser comprising; a fiber core surrounded by an inner fiber portion which in turn is surrounded by an outer sheath; and at last section of the fiber laser leading to a light exit for laser light said sheath being at least partially removed, the sheath at said last section entirely removed, a region of said last section said sheath tapers in wedge-like fashion toward said light exit, and the last section said sheath is removed completely and an outer portion of said inner fiber portion is roughened where said sheath is completely removed leading to said laser light exit (see Figs. 23, 27B, 29, 55A-D, 59 and 84, Column 11, lines 11 – 58, Column 13, lines 43 – 59, Column 22, lines 40 – 60, Column 29, lines 49 – 65, Column 45, lines 19 – 83, Column 50, lines 44 – 55, Column 69, lines 39 – 43).

### ***Response to Arguments***


Applicant's arguments with respect to claims 9 – 20 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (703) 308-6238. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

  
Delma R. Flores Ruiz  
Examiner  
Art Unit 2828

  
Paul Ip  
Supervisor Patent Examiner  
Art Unit 2828

DRFR/PI  
October 18, 2002